



>>Entry Name: 4-Methylaniline

Synonym(s): 4-Methylbenzenamine, 9Cl. *p*-Toluidine, 8Cl. *p*-Tolylamine. 4-Aminotoluene

CAS Registry Number: 106-49-0

Extra CAS Registry Numbers(s): 26915-12-8

Molecular Formula: C₇H₉N

Molecular Weight: 107.155

Accurate Mass: 107.073499

Percentage Composition: C 78.46%; H 8.47%; N 13.07%

Use/Importance: Used as 0.1-0.01*M* aq. soln. for photometric detn. of Tl(*III*) (redox reaction)

Physical Description: Cryst. + 1H₂O (H₂O or EtOH aq.)

Melting Point: Mp 42°. Mp 45° (anhyd.)

Boiling Point: Bp₁₀ 82.2°. Bp 200.6°

Solubility: Sol. H₂O, acids

pK_a Value: pK_a 5.08 (25°)

Other Data: Steam-volatile

Hazard & Toxicity: Severe skin and eye irritant. Skin absorption or inhalation produce the symptoms of methaemoglobinaemia. LD₅₀ (rat, orl) 656 mg/kg

Aldrich: 23631-4

Fluka: 89632

Rare Chemicals Library: S44520-7

Sigma: T8766

>>Derivative: Hydrochloride

CAS Registry Number: 540-23-8

Physical Description: Cryst. (AcOH/Et₂O)

Melting Point: Mp 243°

Boiling Point: Bp 257.5°

Aldrich: 33045-0

Fluka: 89650

Rare Chemicals Library: S56411-7

>>Derivative: Picrate

Melting Point: Mp 180-181 dec.°

>>Derivative: *N*-Formyl

CAS Registry Number: 3085-54-9

Molecular Formula: C₈H₉NO

Molecular Weight: 135.165

Accurate Mass: 135.068414

Percentage Composition: C 71.09%; H 6.71%; N 10.36%; O 11.84%

Physical Description: Needles

Melting Point: Mp 53°

Solubility: Sol. H₂O

Rare Chemicals Library: S58017-1

>>Derivative: *N*-Ac

CAS Registry Number: 103-89-9

Molecular Formula: C₉H₁₁NO

Molecular Weight: 149.192

Accurate Mass: 149.084064

Percentage Composition: C 72.46%; H 7.43%; N 9.39%; O 10.72%

Use/Importance: Used as 0.2*M* soln. in C₆H₆ for extraction-photometric detn. of Au(*III*) (λ_{max} 400 nm, ε 4500, Br⁽⁻⁾/5*M* HCl), W (λ_{max} 405 nm, ε 12000, SCN⁽⁻⁾)

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 146°

Boiling Point: Bp 307°

Other Data: Sublimes

Hazard & Toxicity: Mod. oral toxicity